

**REMARKS**

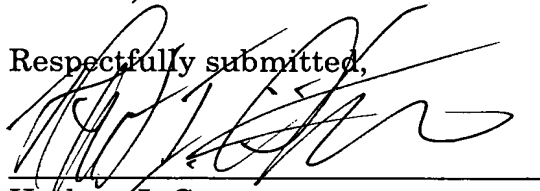
It is respectfully requested that the above amendments be entered prior to calculation of the filing fee and prior to examination. The claims have been amended to remove improper multiple dependencies and to place them in better form for U.S. practice. No new matter has been added. Minor grammatical errors in the specification and abstract have also been corrected.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #02938353061US).

May 27, 2004

Respectfully submitted,



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## ABSTRACT OF THE DISCLOSURE

An iron based sintered body suitable for being enveloped in a light metal alloy such as an aluminum alloy by casting, and a method for producing the same. A mixed powder is prepared by mixing an iron based powder, a copper powder and a graphite powder blended so that the Cu content and the C content are 5 to 40% by mass and 0.5 to 2.5% by mass, respectively, in the mixed powder. A lubricant powder and a fine particle powder for improving machinability may be further added in the mixed powder. Then, the mixed powder is filled into a mold formed to a green compact, and is sintered into a sintered body so that the sintered body has a desired average thermal expansion coefficient. The surface of the sintered body may be adjusted to have a surface roughness  $R_z$  of 10 to 100  $\mu\text{m}$  optionally by applying a shot blast treatment or by a shot blast treatment and an additional steam treatment. This process permits the sintered body to be enhanced in adhesive property and bonding strength while being improved in enveloping casting property when the sintered body is enveloped in the light metal alloy by casting. A martensitic stainless steel powder or ferritic stainless steel powder may be used instead of the pure iron powder, or Cr, Mo and W powders may be further blended.